

What is claimed is:

- 1 1. An air handling unit, comprising:
  - 2 a frame structure which includes a plurality of side pieces;
  - 3 a hinged panel which fits into a corresponding opening in said frame structure;
  - 4 and
  - 5 a living hinge on said hinged panel connectable to one of said side pieces.
- 1 2. An air handling unit according to claim 1, wherein said hinged panel includes:
  - 2 first and second covers; and
  - 3 a panel perimeter, wherein said first cover and said second cover are held in
  - 4 spaced apart relationship with plastic foam entirely filling a cavity thus formed
  - 5 between said first and second covers and said panel perimeter.
- 1 3. An air handling unit according to claim 2, wherein said living hinge includes:
  - 2 a mounting flange;
  - 3 a hinged portion; and
  - 4 an edge extrusion, wherein said hinged portion is disposed between said
  - 5 mounting flange and said edge extrusion, and said edge extrusion is connectable to
  - 6 said panel perimeter.
- 1 4. An air handling unit according to claim 3, wherein said living hinge is one-piece
- 2 with said panel perimeter.
- 1 5. An air handling unit according to claim 4, further comprising a latching
- 2 mechanism disposed in one of said hinged panel and one of said plurality of side
- 3 pieces, wherein said latching mechanism locks said hinged panel into said
- 4 corresponding opening in said frame structure.
- 1 6. An air handling unit according to claim 5, further comprising a compressible seal
- 2 affixed to at least one of said side pieces, such that when said hinged panel is locked
- 3 into said corresponding opening in said frame structure, said hinged panel sealingly
- 4 engages said at least one of said side pieces.

1 7. An air handling unit according to claim 1, wherein said living hinge includes:  
2 a mounting flange;  
3 a hinged portion; and  
4 an edge extrusion, wherein said hinged portion is disposed between said  
5 mounting flange and said edge extrusion, and said edge extrusion is connectable to a  
6 panel perimeter of said hinged panel.

1 8. An air handling unit according to claim 7, wherein said living hinge is one-piece  
2 with said panel perimeter.

1 9. An air handling unit according to claim 8, further comprising a latching  
2 mechanism disposed in one of said hinged panel and one of said plurality of side  
3 pieces, wherein said latching mechanism locks said hinged panel into said  
4 corresponding opening in said frame structure.

1 10. An air handling unit according to claim 9, further comprising a compressible seal  
2 affixed to at least one of said side pieces, such that when said hinged panel is locked  
3 into said corresponding opening in said frame structure, said hinged panel sealingly  
4 engages said at least one of said side pieces.

1 11. An air handling unit according to claim 1, further comprising a latching  
2 mechanism disposed in one of said hinged panel and one of said plurality of side  
3 pieces, wherein said latching mechanism locks said hinged panel into said  
4 corresponding opening in said frame structure.

1 12. An air handling unit according to claim 11, further comprising a compressible  
2 seal affixed to at least one of said side pieces, such that when said hinged panel is  
3 locked into said corresponding opening in said frame structure, said hinged panel  
4 sealingly engages said at least one of said side pieces.

1 13. A hinged panel for an air handling unit, comprising:  
2 first and second covers;  
3 a panel perimeter, wherein said first cover and said second cover are held in  
4 spaced apart relationship with plastic foam entirely filling a cavity thus formed  
5 between said first and second covers and said panel perimeter; and  
6 a living hinge connected to said panel perimeter.

1 14. A hinged panel according to claim 13, wherein said living hinge includes:  
2 a mounting flange;  
3 a hinged portion; and  
4 an edge extrusion, wherein said hinged portion is disposed between said  
5 mounting flange and said edge extrusion, and said edge extrusion is connectable to  
6 said panel perimeter of said hinged panel.

1 15. A hinged panel according to claim 14, wherein said living hinge is one-piece with  
2 said panel perimeter.

1 16. A hinged panel according to claim 14, further comprising a latching mechanism  
2 disposed in said hinged panel.

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